## **CHAPTER V**

# MAJOR CONCERNS IN CARRYING OUT BRAC:

# ITS EFFECT ON PEOPLE, COMMUNITIES,

## AND THE ENVIRONMENT

The end of the Cold War enabled the United States to cut back the large military structure it had built up during the decades following World War II. The cost of peace, however, has not been small. As the Department of Defense (DoD) has reduced the size of its forces and cut military spending, thousands of military and civilian personnel have lost jobs, many companies have closed or cut back their business, and communities across the nation have felt the impact. The BRAC process has played a major part in the drawdown of military forces and has had an impact on many workers and communities. But the impact of BRAC, though widespread, has been sufficiently diffuse to ameliorate the effects of the downsizing and relatively few communities or regions have been affected severely.

### THE IMPACT OF CLOSING BASES: WHO IS HIT AND HOW HARD?

When it is viewed in the context of the nation's economy, according to DoD's projections, BRAC will have a negligible impact on the workforce. When it closes a base, the Department of Defense eliminates jobs both directly and indirectly. The Department estimates that BRAC will result in the loss of approximately 236,000 jobs—including about 120,000 jobs in local economies that are indirectly related to the realigment and closing of bases. Employment cutbacks resulting from BRAC actions are small when compared with the size of today's labor force. Anticipated job losses (which are projected to occur over a period of 12 years) constitute about two-tenths of 1 percent of the nation's total employment level as of August 1996. In addition, the projections represent a worst-case scenario because they do not take into account the potential economic activity that could provide new employment opportunities for those workers affected by base closures and cutbacks.

BRAC actions will take place in virtually every state, but will have the greatest impact on states that have a larger military presence. Much public attention focuses on the effect of closing major bases. Those closures will occur most frequently in defense-oriented states such as California, Texas, Pennsylvania, New York, and Virginia. Many states will experience only one or two major base closures and in a number of states there will be none (see Table 3).

Most states—29 plus the District of Columbia and Guam—will end up losing jobs as a result of BRAC closures and realignments. Among the states in which DoD projects would eliminate the most jobs are California, Florida, Pennsylvania, New

TABLE 3. TOTAL NUMBER OF MAJOR BASE CLOSURES FROM BRAC I THROUGH BRAC IV BY STATE AND U.S. TERRITORY

State	Number of Major Bases Closed	State	Number of Majo Bases Closed	
Alabama	2	Missouri	1	
Alaska	1	Montana	0	
Arizona	1	Nebraska	0	
Arkansas	2	Nevada	0	
California	22	New Hampshire	1	
Colorado	2	New Jersey	1	
Connecticut	0	New Mexico	0	
Delaware	0	New York	5	
District of Columbia	0	North Carolina	0	
Florida	4	North Dakota	0	
Georgia	0	Ohio	3	
Guam	2	Oklahoma	0	
Hawaii	1	Oregon	0	
Idaho	0	Pennsylvania	6	
Illinois	5	Rhode Island	0	
Indiana	4	South Carolina	3	
Iowa	0	South Dakota	0	
Kansas	0	Tennessee	1	
Kentucky	2	Texas	8	
Louisiana	· 2	Utah	2	
Maine	1	Vermont	0	
Maryland	3	<b>Virginia</b>	4	
Massachusetts	3	Washington	1	
Michigan	3	West Virginia	0	
Minnesota	0	Wisconsin	0	
Mississippi	0	Wyoming	0	

SOURCE: Data from the Base Realignment and Closure Commission.

NOTE: BRAC = Base Realignment and Closure.

York, and Texas—all of which have a large military presence. Other states that have a significant military presence, such as Alabama, Indiana, Louisiana, and South Carolina, will also lose thousands of jobs (see Table 4). Employment projections do not take into account offsetting economic activity that could provide new job opportunities for those who would lose jobs as a result of BRAC.

On the positive side, DoD projects that 19 states will experience a net gain in employment as a result of BRAC actions. Washington, Maryland, and Utah will get thousands of new jobs because realignments will create more positions in those states than base closings will eliminate. Employment levels in a number of states—Wisconsin, Iowa, Vermont, Wyoming, Delaware, West Virginia, and Minnesota—will remain virtually unaffected by BRAC actions.

Although BRAC actions will probably affect hundreds of thousands of jobs nationwide, their impact on employment in states, though painful to some people, will probably be small. According to projections by the bipartisan Commission on BRAC, no state would see a drop in employment of more than 1 percentage point as a result of BRAC actions. The Commission projects that unemployment in Guam, a U.S. Trust Territory, could increase by about 8 percent as a result of BRAC actions. The states that could lose the most jobs as a proportion of total state employment include South Carolina, Louisiana, California, and Maine (see Table 5). Those states that could gain new employment, however, would not benefit greatly. The Commission anticipates that only Utah could experience a gain in employment of more than 1 percentage point. Other states standing to gain the most jobs in proportion to their total employment include Rhode Island, Washington, Maryland, and Oklahoma.

Cutbacks in jobs will affect employment figures more in local communities than in states. Nevertheless, according to DoD projections, they are likely to have a small impact on most local areas. The Department of Defense estimates that unemployment in 34 communities affected by base closings under BRAC III could increase by an average of about 5.8 percentage points—considerably higher than projections of increases at the state level. Projections for those communities, however, represent a worst-case scenario because they do not consider potential economic activity that could offset job losses.

BRAC activity is not likely to cause major increases in unemployment in such heavily populated urban areas as Chicago, Dallas, Honolulu, Miami, and New York (see Table 6). First, job losses from base closures and realignments in major metropolitan areas constitute a much smaller portion of local employment than they do in smaller communities. In addition, large cities that have more diverse local economies are better able to accommodate change. In 1992, for example, CBO

TABLE 4. TOP 10 STATES GAINING AND LOSING JOBS AS A RESULT OF BRAC ACTIONS

State	Net Job Increases	State	Net Job Decreases	
Washington	22,546	California	122,919	
Maryland	19,814	Pennsylvania	35,319	
Utah	10,984	South Carolina	18,394	
Illinois	8,674	Louisiana	16,883	
Oklahoma	8,348	Indiana	16,463	
Rhode Island	4.710	New York	13,368	
North Carolina	3,792	Texas	12,739	
New Jersey	3,519	Florida	11,189	
Arizona	2.745	Tennessee	9,156	
Nevada	2,500	Alabama	8,242	

SOURCE: The Base Realignment and Closure Commission.

NOTE: BRAC = Base Realignment and Closure.

TABLE 5. IMPACT OF BRACs ON GAINING AND LOSING JOBS IN TOP 10 STATES AS A PERCENTAGE OF STATE EMPLOYMENT

State	Jobs Lost As a Percentage of State Employment	State	Jobs Gained As a Percentage of State Employment	
South Carolina	-0.97	Utah	1.11	
Louisiana	-0.82	Rhode Island	0.89	
California	-0.75	Washington	0.77	
Maine	-0.61	Maryland	0.74	
Pennsylvania	-0.56	Oklahoma	0.49	
Indiana	-0.53	Nevada	0.32	
Alaska	-0.41	New Mexico	0.17	
Alabama	-0.39	Arizona	0.14	
Colorado	-0.35	Illinois	0.14	
Tennessee	-0.32	North Carolina	0.10	

SOURCE: Data from Base Realignment and Closure Commission.

TABLE 6. POTENTIAL INCREASE IN UNEMPLOYMENT RESULTING FROM BRAC III ACTIONS IN MAJOR METROPOLITAN AREAS

Metropolitan Area	Potential Increase In Unemployment (Percentage Points)			
Norfolk, Virginia Beach	5.6			
Oakland	4.9			
Memphis	4.1			
Orlando	2.5			
Philadelphia	2.2			
San Diego	1.4			
San Francisco	1.2			
Los Angeles, Long Beach	0.5			
Washington, D.C.	0.5			
Honolulu	0.3			
Dallas	0.2			
New York	0.2			
Miami	0.1			
Chicago	0.1			

estimated that unemployment in St. Louis resulting from projected reductions in defense spending could have increased by as much as 3 percentage points between 1991 and 1995 without offsetting economic activity. As of July 1995, however, unemployment in St. Louis was almost 2 percentage points lower than in 1991. Apparently the improvement in the general state of the economy during that period raised employment levels more than had been projected. Growth in other sectors of St. Louis's economy was able to provide jobs for workers laid off because of defense cutbacks.

By contrast, BRAC-related job losses in less-populated areas are likely to have a relatively greater impact on local unemployment (see Table 7). Employment at military bases in less-populated areas usually constitutes a larger proportion of local employment and is therefore likely to have a greater impact when those facilities close. In addition, local economies in less-populated areas tend to be less diverse and therefore less able to provide alternative employment for people who lose their jobs.

#### OTHER POTENTIAL EFFECTS ON LOCAL ECONOMIES

Although the loss of jobs causes the most immediate concern among communities affected by BRAC actions, lost jobs can have a ripple effect on local economies. Lost jobs can lead to relocation of workers and their families and cause a drop in population that can have a widespread effect on the local economy. Fewer residents, for example, reduce the local tax base, resulting in lower revenues with which to finance public services. As a result, local services must be cut back and may not meet the needs of remaining residents. School enrollments may drop, causing school closures, the discontinuance of educational programs, and the elimination of faculty and support jobs. Population decline can also affect the housing market by reducing demand and lowering the value of real estate.

Although the Department of Defense has not collected comprehensive data measuring those effects on communities affected by BRAC actions, a recent review of those measures for selected communities in California suggests that BRAC might not be as auspicious as some have expected. In November 1995, RAND examined local economic data for communities affected by the closing of Castle Air Force Base, Fort Ord, and George Air Force Base.<sup>2</sup> The study selected those bases because

Congressional Budget Office, The Economic Effects of Reduced Defense Spending (February 1992), pp. 39-42.

Michael Dardia, Kevin McCarthy, Jesse Malkin, and Georges Vernez, The Effects of Military Base Closures on Local Communities: A Short -Term Perspective (Santa Monica, Calif.: RAND, 1996).

TABLE 7. POTENTIAL INCREASE IN UNEMPLOYMENT RESULTING FROM BRAC III ACTIONS IN SELECTED LESS-POPULATED LOCALES (In percentage points)

Metropolitan Area	Potential Increase In Unemployment			
Tooele County, Utah	31.8			
Monterey County, California	27.2			
Anniston, Alabama	16.8			
Marquette County, Michigan	16.0			
Charleston, South Carolina	15.3			
Fauquier County, Virginia	14.0			
Vallejo-Fairfield, California	10.7			
Clinton County, New York	10.5			
Franklin County, Pennsylvania	6.5			
Utica-Rome, New York	6.3			
SOURCE: Department of Defense.				

they were located near smaller, more remote communities and therefore more likely to have a greater negative impact on the surrounding areas than bases closing in larger metropolitan areas.

The RAND study found that, with the exception of the area immediately surrounding Fort Ord, the base closures did not appear to prevent the local population from growing. Rapid population growth in San Bernadino County, in which George Air Force Base was located, has continued unabated despite the closure of the base. Urban sprawl around the area of Los Angeles absorbed the effects of the base closing. The population of communities around Castle Air Force Base in central California has grown modestly.

Figures for other local economic and demographic measures, such as local revenues, retail sales, real estate values, and school enrollments, suggest that the impacts of BRAC actions have been modest in all but the most immediate areas. In addition to an expansion of the population in the region surrounding George Air Force Base, for example, the size of the labor force, school enrollment, retail sales, and housing units have also increased. Similar, though more modest growth, has occurred in each of those categories for communities surrounding Castle Air Force Base. Figures for the communities adjacent to Fort Ord, however, are negative. Population in that area has decreased, school enrollment and retail sales are down, and housing vacancies and unemployment have increased. But when those measures were applied to a larger impact area around Fort Ord, including nearby Salinas, the impact has been modest.

To determine the reliability of its conclusions, the RAND study also compared actual measures of impact with projections made by various prognosticators. The figures show that the most gloomy projections have proven inaccurate; actual measures were better than projections in almost every case. Unemployment was lower than projected in areas around Castle Air Force Base and Fort Ord. In February 1992, CBO projected that with no offsetting local economic activity, unemployment in the Monterey labor market area could increase by as much as 8 percentage points following the closure of Fort Ord. The Rand study reported an actual increase in local unemployment of only about 1 percentage point. School enrollment figures were also better than projections for those locales. In addition, figures for city revenues and retail sales were higher than those projected for communities surrounding Fort Ord.

At first, actual figures for categories such as unemployment and retail sales were better than those that were projected, because initial estimates did not attempt to measure offsetting economic activity. As those activities have taken place, a truer picture of the potential impact of closing bases has emerged. Experience in various

locales, for example, indicates that military retirees who previously shopped at stores on military bases turned to the local economy for their purchases. Job opportunities are created when military spouses who were employed in the community relocate. Public and private sector programs reusing base property can also create a significant number of new jobs and can have a multiplier effect on expanding employment in the local community.

The results of the RAND study suggest that researchers should take a closer look at the Department of Defense's projections about the local impact of base closings. Because Rand's findings are based on a limited sample of a few different types of communities in a limited geographic locale, they cannot be applied automatically to communities in other regions of the country. They do suggest, however, that impacts are likely to be more modest than initial estimates that do not attempt to consider offsetting economic activity. Close analysis of such local economic variables as off-base employment of military families, the size and spending patterns of local military retirees, and growth trends in population and economic sectors could provide a more accurate picture of what is likely to occur after a major military base in a local community is closed.

# FEDERAL ASSISTANCE TO COMMUNITIES AND DISPLACED WORKERS

Although BRAC actions will have a major impact on only a few communities and relatively few workers, those affected could have a hard time recovering from economic setbacks. The Department of Defense and other federal agencies offer a wide range of programs to provide general assistance to communities and individuals experiencing economic dislocation, including those affected by base closings and realignments. Some programs are specifically aimed at assisting communities and workers affected by BRAC actions. Although the total cost of those programs is not currently available, recent data suggest that such costs are a relatively small part of the total cost of closing bases. As of August 1996, for example, the federal government awarded about \$559 million in assistance grants to communities and workers affected by the first three rounds of base closures. DoD estimates that it will spend, by comparison, about \$13.1 billion to carry out the first three rounds of BRAC closures.

Four agencies are the principal sources of federal aid to affected communities and workers. The Federal Aviation Administration provided about \$182 million—more than 30 percent of the total thus far—for communities affected

<sup>3.</sup> General Accounting Office, Military Bases: Update on the Status of Bases Closed in 1988, 1991, and 1993 (August 1996), p. 40.

by the first three rounds of BRAC, to assist in converting military aviation facilities to commercial use. The Office of Economic Adjustment in DoD has awarded about \$120 million to assist those communities in planning the reuse of former military bases. The Economic Development Administration in the Department of Commerce has spent more than \$150 million to help them bear the cost of removing buildings, improving infrastructure, and assisting businesses with loans. The Department of Labor also allocated about \$103 million to help retrain workers.

Those transition expenses do not include the government's costs for the multitude of other programs administered by federal agencies that provide general assistance to citizens and communities. Former DoD employees, for example, are entitled to some or all of the following types of assistance: reemployment within DoD or other federal agencies, relocation assistance, voluntary and involuntary separation pay, life insurance, home loan guaranty, medical care, the GI bill, and teacher training and placement. In addition, unemployed former DoD workers are eligible for various entitlement assistance programs including unemployment insurance, education assistance including Pell Grants and student loans, Aid to Families with Dependent Children, Food Stamps, Medicaid, and others. The federal government also provides other forms of assistance to communities through loans awarded by the Small Business Administration, Community Development Block Grants, and Urban Development Action Grants.

This study does not address the effectiveness of the various assistance programs discussed above; rather, it simply describes their availability. The effectiveness of those programs, as costs increase and BRAC actions proceed, might be the object of further study. For example, how quickly have reuse plans been carried out for communities? How have economic indicators such as local income, real estate values, and revenues responded to development grants and loans? How many businesses have participated in federal assistance programs? How have employment levels changed? What proportion of workers participated in various assistance programs? What proportion have been reemployed? What sorts of wage and job differentials have reemployed workers experienced?

#### ENVIRONMENTAL ISSUES AT CLOSING BASES

From the outset of the BRAC process, the Commission has considered the potential environmental impact of closing a base to be one of a number of secondary criteria guiding the choice of its recommendations. The Commission examined a variety of important environmental questions for each military installation, namely the presence of threatened or endangered species, sensitive habitats and wetlands, cultural and historic resources, the use of land and air space, pollution control issues,

environmental cleanup implications, and environmental management costs. But those questions, though considered, were not a determining factor behind the Commission's recommendations. Nevertheless, many of those issues may play an important role in the timing of transfer and the use of former military property.

Cleaning up contaminated sites on closing bases is the most challenging environmental problem DoD must face. First, contamination is widespread and in many cases difficult to clean up to meet federal and local standards. Cleanup plans for 84 closing bases, for example, identified polluted groundwater on 51, contaminated landfills on 67, and unexploded ordnance on 25. Cleaning up polluted groundwater can be a particularly time-consuming task, extending in some cases for decades. Some people have argued that in certain cases, it is impossible to restore groundwater to meet clean water standards. Cleaning up landfills can also be a problem because cleanup standards for each site must be negotiated among DoD, the Environmental Protection Agency, and local regulatory authorities. If incinerating landfill waste is required, costs can be significant. Cleaning up DoD's extensive unexploded ordnance is similarly difficult. (According to reuse plans for major bases closed in the first two rounds of BRAC, more than 55,000 of 190,000 acres contain unexploded ordnance.)4 There are no national standards governing the recovery and disposal of unexploded ordnance, and the cost of cleaning up such sites can be prohibitively expensive. Reuse plans currently envision transferring most of such property to the Fish and Wildlife Service for use as wildlife preserves, thereby avoiding significant cleanup costs.

The high cost of cleaning up contamination reflects the difficulty of the Department of Defense's task. DoD estimates that it will spend about \$6.6 billion to clean up bases scheduled to be closed in the four rounds of BRAC. That estimate understates the full cost of cleanup, however, because it only covers the six-year period governing the completion of the BRAC process. Many cleanup procedures, particularly those for decontaminating groundwater, will probably take longer than six years and will incur additional operating and support costs.

Cleanup costs have already grown significantly beyond DoD's initial estimates for the first two rounds of base closures and are likely to increase further. In January 1990, for example, the Department of Defense estimated that it would spend about \$570 million to clean up bases being closed by BRAC I; in March 1996, DoD's estimate increased to about \$1.1 billion. DoD's spending plans for cleaning up BRAC II bases have also increased dramatically. According to DoD estimates,

General Accounting Office, Military Bases: Case Studies on Selected Bases Closed in 1988 and 1991 (August 1995), p.6.

spending during the cleanup period for those bases has increased from about \$800 million in 1991 to almost \$2 billion in 1995.

Cleanup costs are increasing for a variety of reasons, the most important of which is the Department of Defense's increased understanding of the full scope of the task it faces. In its preliminary work, DoD has discovered additional contaminated sites and different and more extensive pollution than originally estimated. Estimated costs are likely to continue to increase because most of DoD's work—including 84 bases for which cleanup plans have been completed—is still in the early phase of identifying and characterizing contamination problems. Higher cleanup standards and more expensive decontamination technologies than originally anticipated have also contributed to greater costs.

Although environmental contamination on closing bases poses a huge technical and financial challenge, it does not generally pose an immediate obstacle to carrying out most current reuse plans. First, the law does not require DoD to complete cleanup actions on property it retains or transfers to other federal agencies before a transfer is completed. (According to reuse plans, DoD or other federal agencies will retain about one-half of the total acreage of former military property on bases closed by the first three rounds of base closures.) In addition, DoD and the Congress have taken steps to permit the reuse of former military property before completing the cleanup of a closing base. The Congress has adopted legislation permitting DoD to lease property or transfer uncontaminated parcels of land to non-federal users.

Nevertheless, contaminated property on closing bases poses significant problems. The uncertainty of the nature and extent of contamination on former bases can discourage potential users and investors from risking involvement when safer alternatives exist. Since clean property is more attractive to potential investors and users, the challenge is to identify such property quickly and promote the transfer of parcels that hold the most promise for economic recovery or public benefit. The Department of Defense could also examine alternative policies governing the way in which cleanup funds are spent. Currently, DoD has assigned high priority to all cleanup sites on closing bases and has received funding that might otherwise not have been available. As the costs of cleanup increase and budgetary constraints grow tighter, DoD may have to choose among the environmental tasks it faces. Under those circumstances, DoD could manage funding for cleanup more effectively if it assigned priority to cleaning up those sites that are most threatening to health and safety (those on the National Priorities List) and those that offer the greatest promise for economic return.

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